

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Arne HOLM et al

Serial No. 09/408,578

Group Art Unit 1646

Filed: September 29, 1999

For: METHOD FOR PREPARING A LIGAND PRESENTING
ASSEMBLY (LPA), AN LPA AND USES THEREOF

INFORMATION DISCLOSURE STATEMENT

Asst. Commissioner of Patents
Washington, D.C. 20231

Sir:

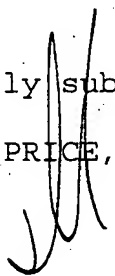
As a means of complying with the duty of disclosure under 37 CFR §1.56, and in accordance with 37 CFR §§1.97 and 1.98, Applicants, through the undersigned attorney, submit this Information Disclosure Statement. The patents, publications or other information submitted herewith are listed on the attached Form PTO-1449.

In accordance with 37 CFR §1.97(b)(3), this Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits of the above-identified application. Accordingly, no fee is due.

Respectfully submitted,

JACOBSON, PRICE, HOLMAN & STERN

By:



D. Douglas Price
Reg. No. 24,514

400 Seventh Street, N.W.
Washington, D.C. 20004
(202) 638-6666
Atty. Dkt. No. P63882US0

JACOBSON, PRICE, HOLMAN & STERN, PLLC
 400 SEVENTH STREET, N.W.
 WASHINGTON, D.C. 20004-2201

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.: P63882US0 GROUP ART UNIT: 1646
 SERIAL NO.: 09/408,578 FILING DATE: September 29, 1999
 APPLICANT(S): Arne HOLM et al

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB- CLASS | FILING DATE (If Appropriate) |
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| | AH | WO98/15648 | 04-16-98 | WIPO | | : |
| | AI | WO98/32469 | 07-30-98 | WIPO | | : |
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| AL | Nyfeler, R., "Peptide Synthesis via Fragment Condensation", METHODS IN MOLECULAR BIOLOGY, Chapt. 15, 1994, pp. 303-316 |
| AM | Marshall, G.R., "A Hierarchical Approach to Peptidomimetic Design", TETRAHEDRON, Vol. 49, No. 17, 1993, pp. 3547-3558 |
| AN | Tuchscherer, G. et al, "Templates in Protein de novo Design", JOURNAL OF BIOTECHNOLOGY, 41, 1995, pp. 197-210 |
| AO | Alberts, D.P. et al, "Synthesis of a novel hematopoietic Peptide, SK&F 107647", PEPTIDES: CHEMISTRY, STRUCTURE AND BIOLOGY, 1993, pp. 367-369 |
| AP | Lange, M. et al, "Synthesis and Activity of Dimeric Bradykinin Antagonists Containing Diaminodicarboxylic Acid Bridge Residues" JOURNAL OF PEPTIDE SCIENCE, 4, 1996, pp. 289-293 |

EXAMINER

DATE CONSIDERED

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

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- BB Drijfhout, J.W. et al, "A new synthetic functionalized antigen carrier", INT. J. PEPTIDE PROTEIN RES., 37, 1991, pp. 27-32
- BC Defoort, J. et al, "A rational design of synthetic peptide vaccine with a built-in adjuvant", INT. J. PEPTIDE PROTEIN RES., 40, 1992, pp. 214-221
- BD Lu, Y. et al, "Chemically unambiguous peptide immunogen: preparation, orientation and antigenicity of purified peptide conjugated to the multiple antigen peptide system", MOLECULAR IMMUNOLOGY, Vol. 28, No. 6, 1991, pp. 623-630
- BE Keah, H. et al, "Direct synthesis and characterisation of multi-dendritic peptides for use as immunogens, J. PEPTIDE RES., 51, 1998, pp. 2-8
- BF Nardelli, B. et al, "Oral administration of an antigenic synthetic lipopeptide (MAP-P3C) evokes salivary antibodies and systemic humoral and cellular responses", VACCINE, Vol. 12 No. 14, 1994, pp. 1335-1343
- BG Nardelli, B. et al, "A chemically defined synthetic vaccine model for HIV-1", THE JOURNAL OF IMMUNOLOGY, Vol. 148, No. 3, February 1, 1992, pp. 914-920
- BH Sarin, V. et al, "Quantitative Monitoring of Solid-Phase Peptide Synthesis by the Ninhydrin Reaction", ANALYTICAL BIOCHEMISTRY, 117, 1981, pp. 147-157
- BI Heegaard, P. et al, "A Stem Peptide Carrier for the Immuno-Genic Presentation of Peptides", INNOVATION AND PERSPECTIVES IN SOLID PHASE SYNTHESIS, Chapt. 32, 1998, pp. 143-146
- BJ Tam, J., "Synthesis and Applications of Branched Peptides in Immunological Methods and Vaccines", EPITOPE MAPPING WITH PEPTIDES IN PEPTIDES: SYNTHESIS, STRUCTURES, AND APPLICATIONS, Chapt. 12, 1995, pp. 455-499
- BK Hodge, P. "Polymer science branches out", NATURE, Vol. 362, 4 March 1993, pp. 18-19

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ATTY. DOCKET NO.: P63882USO GROUP ART UNIT: 1646
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APPLICANT(S): Arne HOLM et al

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

CA Tomalia, D. et al, "Starburst Dendrimers: Molecular-Level
Control of Size, Shape, Surface Chemistry, Topology, and
Flexibility from Atoms to Macroscopic Matter", ANGEW. CHEM.
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CB Tam, J. "Recent advances in multiple antigen peptides",
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Arne HOLM et al

Serial No. 09/408,578

Group Art Unit 1646

Filed: September 29, 1999

For: METHOD FOR PREPARING A LIGAND PRESENTING
ASSEMBLY (LPA), AN LPA AND USES THEREOF

SECOND INFORMATION DISCLOSURE STATEMENT

Asst. Commissioner of Patents
Washington, D.C. 20231

Sir:

As a means of complying with the duty of disclosure under 37 CFR §1.56, and in accordance with 37 CFR §§1.97 and 1.98, Applicants, through the undersigned attorney, submit this Information Disclosure Statement. The publication submitted herewith is listed on the attached Form PTO-1449.

In accordance with 37 CFR §1.97(b)(3), this Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits of the above-identified application. Accordingly, no fee is due.

Respectfully submitted,

JACOBSON, PRICE, HOLMAN & STERN

By: 

D. Douglas Price
Reg. No. 24,514

400 Seventh Street, N.W.
Washington, D.C. 20004
(202) 638-6666
Atty. Dkt. No. P63882US0

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400 SEVENTH STREET, N.W.
WASHINGTON, D.C. 20004-2201

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.: P63882US0 GROUP ART UNIT: 1646
SERIAL NO.: 09/408,578 FILING DATE: September 29, 1999
APPLICANT(S): Arne HOLM et al

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB- CLASS | FILING DATE (If Appropriate) |
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| _____ | AB | _____ | _____ | _____ | _____ | _____ |
| _____ | AC | _____ | _____ | _____ | _____ | _____ |
| _____ | AD | _____ | _____ | _____ | _____ | _____ |
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| _____ | AJ | _____ | _____ | _____ | _____ | _____ |
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FOREIGN PATENT DOCUMENTS

| | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB- CLASS | TRANSLATION (YES) (NO) |
|-------|--------------------|-------------------|-----------------|-------|---------------|---------------------------|
| _____ | AL | <u>WO98/11125</u> | <u>03-19-98</u> | _____ | _____ | _____ |
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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

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_____ AT _____

EXAMINER

DATE CONSIDERED

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Arne HOLM

Serial No.: 09/498,578

Group Art Unit: 1627

Filed: September 29, 1999

Examiner: T. Wessendorf

For: METHOD FOR PREPARING A LIGAND PRESENTING ASSEMBLY (LPA), AN LPA
AND USES THEREOF

THIRD INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner of Patents
Washington, DC 20231

Sir:


As a means of complying with the duty of disclosure under 37 CFR §1.56, and in accordance with 37 CFR §§1.97 and 1.98, Applicant(s), through the undersigned attorney, submits this Information Disclosure Statement. WO 90/11778, relevance of which is discussed at page 2 of the specification is submitted, herewith, and listed on the attached Form PTO-1449.

In accordance with 37 CFR §1.97(b)(3), this Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits of the above-identified application.

Respectfully submitted,

JACOBSON, PRICE, HOLMAN & STERN

By:


for Harvey B. Jacobson, Jr.
Reg. No. 20,851

400 Seventh Street, N.W.
Washington, DC 20004
(202) 638-6666
Atty. Dkt. No. P63882US0
HBJ:WEP/vjb
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Sheet 1 of 1

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

LIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: May 2, 2001

ATTY DOCKET NO.:

P63882US0

SERIAL NO.:

09/408,578

APPLICANT: Arne HOLM

FILING DATE: 9-29-99

GROUP: 1627

U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

| DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION YES NO |
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| 90/11778 | 10-18-90 | WIPO (WO) | | | |
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OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

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400 SEVENTH STREET, N.W.
WASHINGTON, D.C. 20004-2201

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.: P63882US0 GROUP ART UNIT: 27
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APPLICANT(S): Arne HOLM et al September 29, 1999

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| <u>tdw</u> | AA 4,608,251 | 08-26-86 | Mia | 424 | 85 | |
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| | AI WO98/32469 | 07-30-98 | WIPO | | | : |
| | AJ WO94/02506 | 02-03-94 | WIPO | | | : |
| | AK WO93/24523 | 12-09-93 | WIPO | | | : |

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| <u>tdw</u> | AL | Nyfeler, R., "Peptide Synthesis via Fragment Condensation", METHODS IN MOLECULAR BIOLOGY, Chapt. 15, 1994, pp. 303-316 |
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- JPW*
- BA Bhatnagar, P.R. et al. "Structure-Activity Relationships of Novel Hematoregulatory Peptides", J. MED. CHEM., 1996, 39, pp. 3814-3819
- BB Drijfhout, J.W. et al. "A new synthetic functionalized antigen carrier", INT. J. PEPTIDE PROTEIN RES., 37, 1991, pp. 27-32
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- BG Nardelli, B. et al. "A chemically defined synthetic vaccine model for HIV-1", THE JOURNAL OF IMMUNOLOGY, Vol. 148, No. 3, February 1, 1992, pp. 914-920
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- BK Hodge, P. "Polymer science branches out", NATURE, Vol. 362, 4 March 1993, pp. 18-19
- Not on file*

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THW CA Tomalia, D. et al, "Starburst Dendrimers: Molecular-Level
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| Notice of References Cited | Applicant/Patent Holm t al | Application/Control No. 09/408,578 | |
| | Examiner T. W ssendorf | Art Unit 1627 | Page 1 of 1 |

U.S. PATENT DOCUMENTS

| * | Document Number <small>Country Code-Number-Kind Code</small> | Date <small>MM-YYYY¹</small> | Name | Classification ² |
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NON-PATENT DOCUMENTS

| * | Include, as applicable: Author, Title, Date, Publisher, Edition or Volume, Pertinent Pages |
|-----|---|
| U | Mihara et al, J. Chem. Soc. Perkin Trans. (1995), 6, 1133-40. |
| X V | Lange et al, Jmrl. of Pept. Sci. (1998), 4, 289-293. |
| W | Gilon et al, Peptide Chemistry, 1992, Proc. Jpn. symp. 2nd. (1993), Meeting date, 1992, 482-485 |
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* A copy of this reference is not being furnished with this Office action. See MPEP § 707.05(a).

¹ Dates in MM-YYYY format are publication dates.

² Classifications may be U.S. or foreign.